

## LIFE EXTENDING PROBE AND METHOD

### ABSTRACT OF THE DISCLOSURE

Described are methods for pressurizing elastic support structures or balloons in sensor probes used for the inspection of components having areas of limited access.

- 5 When inflated, the balloons press flexible sensors against the surface of the material under test. When deflated, the balloons permit easier insertion of the probes into the component and reduce the mechanical stresses on the sensors, thereby extending the sensor lifetime. By sequentially partially inserting the sensor into a limited access area from either side of the limited access area and scanning in opposite directions, the entire
- 10 surface of the test material can be inspected.